

In the Claims

Claims 41-42 and 44 have been amended.

Claims 1-40 (Cancelled)

41. (Currently Amended) A method for analyzing a biological sample, said method comprising the steps of:

placing a silica sol gel monolith that has a plurality of pores formed therein which have an average diameter in the range of 30-400 angstroms into an electrophoresis apparatus;

pouring a buffer into the electrophoresis apparatus to immerse the silica sol gel monolith;

inserting the biological sample into the silica sol gel monolith; and

applying power to the silica sol gel monolith such that molecules of the biological sample migrate within at least a portion of the plurality of pores formed within the silica sol gel monolith.

42. (Currently Amended) The method of Claim 41, further comprising the steps of:

staining the biological sample; and

photographing the silica sol gel monolith to have a record of the migrated molecules of the biological sample.

43. (Previously Presented) The method of Claim 41, wherein said molecules are proteins or nucleic acids.

44. (Currently Amended) The method of Claim 41, wherein said silica sol gel monolith was is made by using an acid catalyzed hydrolysis process in which tetramethyl orthosilicate was mixed with HF and HNO₃ in a water bath.